REMARKS

Applicants' invention is set forth in remaining claims 2, 3 and 5 and newly introduced claims 8, 9 and 10 corresponding thereto, with explicit recitation of the automatic nature of operation of the recited structure.

As noted during prior prosecution, applicants' invention provides an earphone set for use with two sound sources and which, in the embodiment of Figs. 3 and 4 covered by the claims, provides an ***automatic switching operation***, carried out by one means (the second means of claims 2 and 8, as well as the fourth means of claim 3, and the second means of claim 9), which automatically switches the sound being reproduced by a transducer from sound originating at a first source (audio device) to sound originating at a second source (communication device), by automatically connecting and disconnecting respective plugs connected thereto. The second means of claims 2 and 8 is illustrated by switches 31 and 32, as well as by the switch hold circuit 35, in Fig. 4, for example.

Such automatic operation is explicitly recited as being carried out ***in response to detection*** that another means (the first means of claims 2 and 8) has generated a particular signal representing output of a particular signal by the communication device, or that such other means (e.g., the third means of claim 3 and the first means of claim 9) has detected a speech signal from the communication device which exceeds a threshold reference level.

Indeed, additional automatic switching is implemented by the claimed invention in claims 3 and 9 in response to ***timing duration determinations***.

More specifically, the fifth means of claim 3 (or the third means of claim 9) respond to detection of a ***reduction in signal level*** detected by the third means of claim 3 (or the first means of claim 9) which extends for a time length ***in excess of a predetermined interval*** by ***automatically reconnecting the audio device***.

Still further, claim 3 (and claim 9) provides a sixth means (fourth means in claim 9) which responds to detection by the third means of claim 3 (first means of claim 9) of a reduction in signal level which ***does not exceed the predetermined interval***. Upon such a detection, the respective means are required to ***maintain connection to the communication device***.

It is courteously submitted that ***none of these features is disclosed in the applied art***, which thus fails to anticipate or to make obvious the subject matter of the claims.

The New Claims

It is first noted that the distinction between claims 2 and 8 is explicit use of the word "automatically", although it is submitted that operation of claim 2 in response to signal detection is, itself, automatic (implemented by the recited means without user intervention) as opposed to manual (implemented by the user).

A distinction between claims 3 and 9 is that claim 9 is not dependent on claim 8,

and thus does not include the first and second means recited therein. Accordingly, numbering of the "means" recited in claim 9 differs from the numbering of similar means recited in claim 3. Moreover, claim 9 also provides explicit use of the word "automatically", although, as noted with respect to claim 2, it is submitted that operation of claim 3 in response to signal detection is, itself, automatic as opposed to manual.

Claim 10 repeats the recitation of claim 5, with dependence on claim 8.

The Official Action

Claims 2 and 5 are rejected. under 35 U.8.C. 102(e) as being anticipated by Young, III (U.S. Patent No. 6,694,467). Applicants respectfully traverse the rejection of claim 2, and argue for patentability of newly submitted claim 8 corresponding thereto, for the following reasons.

Traverse

The earphone apparatus of claim 2 and new claim 8 features:

(1) a first means for detecting whether or not a call-related electric signal is outputted from the portable communication terminal device, and generating a detection result signal representative of a result of said detecting, and

(2) a second means for ***automatically*** disconnecting the first plug from the electroacoustical transducer and ***automatically*** connecting the second plug to the electroacoustical transducer ***in response to the detection result signal*** generated by the

first means, when the first means detects that a call-related electric signal is outputted from the portable communication terminal device.

As hereinabove noted, the first means in claims 2 and 8 is illustrated by the level detection circuit 34 in Fig. 4. The second means in claims 2 and 8 is illustrated by the switches 31 and 32, and the switch hold circuit 35 in Fig. 4.

On the other hand, ***Young fails to disclose any such automatic operation*** and thus fails to support a rejection of claim 2 (or claim 8) under 35 USC 102, as such rejection requires the applied reference to disclose each and every one of the limitations of the rejected claim.

The thrust of the Young disclosure is to provide a ***manually operated system which switches between an audio source and a telephone signal source.***

Such manual operation is disclosed repeatedly.

For example, Young, III, column 2, lines 25-28, discloses that "the system is manually switched between Modes by the user", and that "a handset lift device is manually actuated by the user to select between the Bypass Mode and the operational modes (Telephone Mode and Music Mode)."

Nothing therein teaches the system has means responsive to signals generated by other means indicating a particular call-related electric signal.

Moreover, when the user positions the microphone or lifts the handset, the Young

system does not reconnect plugs, and fails to disconnect the plug from the audio source. Instead, the system generates a ***pause signal***, in order to ***pause the Music Source 30*** (col. 3, lines 3-6. In fact, transition to the Telephone Mode is implemented when a ***ring signal*** is detected on the ***phone line 26, at which point the user operates the handset and microphone*** as disclosed at col. 4, lines 35-49.

The reference discloses that, in the Music Mode, the telephone 10 is not connected to the phone line 26, and the microphone 42 "sound pick-up" is fed to the mixer along with a ring tone generated by the control box 20 when it senses a ring signal on the phone line 26. Moreover, the reference explicitly states (col. 4, lines 46-49) that "Control Box 20 does not provide a pause control over line 29 ... When the telephone rings while in this Mode, the user simply lowers the microphone to switch to the Telephone Mode."

Such operation clearly fails to meet the recitation of, in the first instance, detecting whether a call related signal is outputted from the communication device, and secondly, providing a structural means which provides the various connection and disconnection functions "in response to the detection result signal generated by the first means when the first means detects that a call-related electric signal is outputted from the portable communication terminal device", as required by claims 2 and 8.

It is appreciated, however, that at column 5, lines 47-50 the reference discloses that "Control Box 20 can be designed to automatically switch the system from the Music

Mode to the Telephone Mode when a telephone ring signal is detected on Phone Line 26."

However, even if such hypothetical suggestion is considered, the reference nonetheless fails to teach the second means in claim 2 or claim 8. As hereinabove noted, the second means implements automatically switching in response to the detection result signal generated by the first means. which detects that "a call-related electric signal is outputted from the portable communication terminal device".

In the suggestion of the Young, III, reference however, no such signal is used. Rather, as noted therein, the automatic switching is implemented "when a telephone ring signal is detected on Phone Line 26."

In other words, Young clearly fails to teach a first means as recited in claims 2 and 8, which detects whether or not a call-related electric signal "is outputted from the portable communication device". Further, Young fails to teach or suggest a second means which responds to the non-existent first means.

It is thus clear that the Young reference fails to support rejection of claim 2 under 35 USC 102, and fails to teach or suggest the invention recited therein, or in claim 8.

As clearly seen, in Young, III, the system is manually switched between modes by the user. Accordingly, applicants submit that claims 2 and 8 are neither anticipated nor made obvious by Young, III.

For similar reasons, applicants submit that claims 5 and 10, depending from claims 2 and 8, are neither anticipated nor made obvious by Young, III.

Claims 3 and 9

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Young, III in view of Slater (U.S, Patent No. 4,941,187).

It is first noted that, among its recitations, claim 3 includes means detecting signals outputted from the communication device, and means responsive to those means for automatically connecting and disconnecting the plugs. It has already been shown that Young fails to teach or suggest any such structure.

It is noted that, similarly to Young, Fig. 1 of Slater clearly shows that a priority switch 22 is a manually-operated switch. Thus, the priority switch 22 in Slater is operated by the user, and not in response to any signal, much less a signal generated by a first means as recited by applicants. To that extent, it is courteously submitted that Slater fails to cure the deficiencies of Young, III and, accordingly, even if combined therewith, the Action fails to provide a combination of prior art which makes a prima facie showing of obviousness of rejected claim 3.

However, the Examiner does not apply Slater to supply the above missing features of Young, Rather, with respect to claim 3, the Examiner appears to have misinterpreted the claim to require regulating a signal level at predetermined stages.

Thus, in rejecting the claim, the Action states that Young fails to "disclose means of regulating/controlling the signals that predetermined reference levels."

However, that is not the concept recited in claim 3. No signal regulation at predetermined reference levels is recited. Instead, claim 3 relates to signal level detection, and switching in response to a result of the signal level detection.

The earphone apparatus of claims 3 (and 9) features:

(1) the third means in claim 3 (first means, in claim 9) for detecting a level of an electric speech signal outputted from the portable communication terminal device,

(2) the fourth (second) means for automatically disconnecting the first plug from the electroacoustical transducer and automatically connecting the second plug to the electroacoustical transducer when the level detected by the third (first) means is equal to or higher than a predetermined reference level,

(3) the fifth (third) means for automatically disconnecting the second plug from the electroacoustical transducer and automatically connecting the first plug to the electroacoustical transducer in cases where the level detected by tile third (first) means drops below the predetermined reference level and then remains lower than the predetermined reference level for a duration longer than a predetermined time length, and

(4) the sixth (fourth) means for holding the first plug disconnected from the electroacoustical transducer and holding the second plug connected to the

electroacoustical transducer in cases where the level detected by the third (first) means drops below the predetermined reference level and then remains lower than the predetermined reference level for a duration which is not longer (e.g., equal to or shorter) than the predetermined time length.

These recitations are directed to the embodiment of Figs. 3 and 4 (the second embodiment) in the present application.

The third means in claim 3 (first means of claim 9) corresponds, for example, to the level detection circuit 34 in Fig. 4. The fourth, fifth and sixth means of claim 3 (second, third, and fourth means in claim 9) correspond, for example, to the switches 31 and 32, the level detection circuit 34, and the switch hold circuit 35 in Fig. 4.

Applicants respectfully submit that, although Young, III discloses a ring tone generated by the control box 20 when it senses a ring signal on the phone line 26 (column 4. lines 38-49), the reference fails to teach the third means in claim 3 which operates for detecting a level of an electric speech signal outputted from the portable communication terminal device. Moreover, Young, III fails to teach the fourth, fifth and sixth means in claim 3 (second, third, and fourth means in claim 9).

Inasmuch as Slater fails to teach the fourth, fifth and sixth means in claim 3 (second, third, and fourth means in claim 9), it is courteously submitted that the art applied to claim 3 fails to establish a prima facie showing of obviousness thereof, or of

corresponding claim 9.

In view of the foregoing, and upon withdrawal of the only rejections pending in the Office Action, it is respectfully submitted that the application is in condition for allowance and an early indication of the same is courteously solicited. In order to expedite resolution of any remaining issues and further to expedite passage of the application to issue, the Examiner is respectfully requested to contact the undersigned by telephone at the below listed local telephone number if any further comments, questions or suggestions arise in connection with the application.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, DC 20231

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Respectfully submitted,

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